

IN THE CLAIMS

1. (Currently Amended) A method comprising:

detecting an occurrence of one of a plurality of privileged events in a virtual machine (VM) environment having guest software and a plurality of virtual machine monitors (VMMs), wherein the plurality of VMMs is designated to handle the plurality of privileged events that is ~~not to~~ cannot be handled by the guest software in the VM environment;

determining which one of the plurality of VMMs is to handle the detected privileged event based on at least one of a characteristic of the detected privileged event or characteristics of the VMMs; and

transitioning control to said one of the plurality of VMMs.

2. (Original) The method of claim 1 wherein the plurality of VMMs includes a main VMM and one or more parallel VMMs.

3. (Currently Amended) The method of claim 1 wherein determining which one of a plurality of VMMs is to handle the detected privileged event comprises:

determining a type of the detected privileged event; and

identifying one of the plurality of VMMs that is designated to handle privileged events of the determined type.

4. (Currently Amended) The method of claim 1 wherein determining which one of a plurality of VMMs is to handle the detected privileged event comprises:

accessing a field associated with the detected privileged event in a resource; and

identifying one of the plurality of VMMs that is designated to handle the detected privileged event based on a value of the field.

5. (Currently Amended) The method of claim 4 wherein the field associated with the detected privileged event is a field associated with a type of the detected privileged event.

6. (Currently Amended) The method of claim 4 wherein the field associated with the detected privileged event is a field associated with an input-output address range to which an input-output address of the detected privileged event belongs.

7. (Currently Amended) The method of claim 4 wherein the value of the field associated with the detected privileged event is either predetermined or dynamically configurable.

8. (Currently Amended) The method of claim 1 wherein determining which one of a plurality of VMMs is to handle the detected privileged event comprises:

evaluating resource usage parameters of the plurality of VMMS; and

identifying one of the plurality of VMMs that is designated to handle the detected privileged event based on evaluation of the resource usage parameters.

9. (Original) The method of claim 4 wherein the resource resides in any one of a memory, a processor, a chipset, and an input-output device.

10. (Currently Amended) The method of claim 1 wherein the detected privileged event represents any one of an interrupt, an exception, an execution of a privileged instruction, and a platform event.

11. (Currently Amended) The method of claim 1 wherein the detected privileged event occurs during an operation of guest software.

12. (Currently Amended) The method of claim 1 wherein the detected privileged event occurs during an operation of one of the plurality of VMMs.

13. (Currently Amended) A system comprising:

a plurality of virtual machine monitors (VMMs) designated to handle a plurality of privileged events; and

routing logic to detect an occurrence of [[a]] one of the plurality of privileged events that cannot be handled by guest software, to determine which one of the plurality of VMMs is to handle the detected privileged event based on at least one of a characteristic of the detected privileged event or characteristics of the VMMs, and to transition control to said one of the plurality of VMMs.

14. (Original) The system of claim 13 wherein the plurality of VMMs includes a main VMM and one or more parallel VMMs.

15. (Currently Amended) The system of claim 13 wherein the routing logic is to determine which one of the plurality of VMMs is to handle the detected privileged event by determining a

type of the privileged event, and identifying one of the plurality of VMMs that is designated to handle privileged events of the determined type.

16. (Currently Amended) The system of claim 13 wherein the routing logic is to determine which one of the plurality of VMMs is to handle the detected privileged event by evaluating resource usage parameters of the plurality of VMMs, and identifying one of the plurality of VMMs that is designated to handle the detected privileged event based on evaluation of the resource usage parameters.

17. (Currently Amended) The system of claim 13 wherein the detected privileged event represents any one of an interrupt, an exception, an execution of a privileged instruction, and a platform event.

18. (Currently Amended) The system of claim 13 wherein the detected privileged event occurs during an operation of guest software.

19. (Currently Amended) The system of claim 13 wherein the detected privileged event occurs during an operation of one of the plurality of VMMs.

20. (Currently Amended) A system comprising:

a memory having stored therein guest software and a plurality of virtual machine monitors (VMMs) designated to handle a plurality of privileged events; and

a processor, coupled to the memory, to execute the guest software, to detect an occurrence of one of the plurality of privileged events that cannot be handled by the guest

software, to determine which one of the plurality of VMMs is to handle the detected privileged event based on at least one of a characteristic of the detected privileged event or characteristics of the VMMs, and to transition control to said one of the plurality of VMMs.

21. (Original) The system of claim 20 wherein the plurality of VMMs includes a main VMM and one or more parallel VMMs.

22. (Currently Amended) The system of claim 20 wherein the processor is to determine which one of the plurality of VMMs is to handle the detected privileged event by determining a type of the privileged event, and identifying one of the plurality of VMMs that is designated to handle privileged events of the determined type.

23. (Currently Amended) The system of claim 20 wherein the processor is to determine which one of the plurality of VMMs is to handle the detected privileged event by evaluating resource usage parameters of the plurality of VMMs, and identifying one of the plurality of VMMs that is designated to handle the detected privileged event based on evaluation of the resource usage parameters.

24. (Original) The system of claim 20 wherein the privileged event represents any one of an interrupt, an exception, an execution of a privileged instruction, and a platform event.

25. (Currently Amended) The system of claim 20 wherein the detected privileged event occurs during operation of any one of guest software and one of the plurality of VMMs.

26. (Currently Amended) A machine-readable storage medium storing instructions which, when executed by a processing system, cause the processing system to perform a method, the method comprising:

detecting an occurrence of one of a plurality of privileged events in a virtual machine (VM) environment having guest software and a plurality of virtual machine monitors (VMMs), wherein the plurality of VMMs is designated to handle the plurality of privileged events that is not to ~~not to~~ cannot be handled by the guest software in the VM environment;

determining which one of the plurality of VMMs is to handle the detected privileged event based on at least one of a characteristic of the detected privileged event or characteristics of the VMMs; and

transitioning control to said one of the plurality of VMMs.

27. (Original) The machine-readable medium of claim 26 wherein the plurality of VMMs includes a main VMM and one or more parallel VMMs.

28. (Currently Amended) The machine-readable medium of claim 26 wherein the detected privileged event represents any one of an interrupt, an exception, an execution of a privileged instruction, and a platform event.

29. (Currently Amended) The machine-readable medium of claim 26 wherein the detected privileged event occurs during operation of any one of guest software and one of the plurality of VMMs.